SAVINOV, S., inzh.

Automated mortar plant. Na stroi.Ros. 3 no.4:35-36 Ap '62.
(MIRA 15:9)

(Mortar) (Automatic control)

SAVINOV, S., inzh.

New developments in building practices. Zhil. stroi. no.2:16 '62. (MIRA 16:1)

(Building—Technological innovations)

PFUL', B., inzh.; SAVINOV, S., inzh.

Small equipment for finishing work in Czechoslovakia. Zhil. stroi. no.1: 30-31 '63. (MIRA 16:2)
(Czechoslovakia—Building—Tools and implements)

SAVINOV, S., inzh.

New developments in building technology. Zhil. stroi. no.2: 29-30 '63. (MIRA 16:3)
(Building--Technological innovations)

SAVINOV, S., inzh.

Polymer floors. Na stroi. Ros. 3 no.1:37 Ja '62. (MIRA 16:5)
(Polymers) (Floors)

SAVINOV, S., inzh.; KARYAKO, B., inzh.

New developments in building practice. Na stroi. Ros. 3 no.10:11,37 O '62. (MIRA 16:6)

(Building—Technological innovations)

SAVINOV, S., inzh.

At the Polish Exhibition of Construction Equipment. Zhil. stroi. no.2:30-32 '63. (MIRA 16:3)
(Moscow--Exhibitions) (Poland--Construction equipment)

SAVINOV, S., inzh.

Automated block mortar unit. Zhil. stroi. no.6:32 '63.
(MIRA 16:10)

SAVINOV, S., inzh.

With a guarantee of high quality. Na stroi. Ros. no.12:34 D '61.
(MIRA 16:1)

(Moscow—Apartment houses)
(Precast concrete construction)

ZAYTNOV, G.

Reconnaissance before everything else. Voen. znan. 40 no.4:
14-15 Ap '64. (MIRA 17:6)

SAVINOV, S.F., Cand Tech Sci — (diss) " Filtration of concrete dams on foundations of slight permeability." Gor'kiy, 1957. 18 pp (Min of Higher Education USSR. Gor'kiy Construction Engineering Inst im V.P. Chkalov), 100 copies (KL,24-58, 120)

SAVINOV, S. F.

AUTHOR: Savinov, S.F. 21-5-15/26

TITLE: Counterpressure on the Base of Concrete Dams Constructed on Foundations of Insignificant Porosity (Protivodavleniye na podoshvu betonnykh plotin, raspolozhennykh na malopronitsayemykh osnovaniyakh)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1957, Nr 5, pp. 485-488 (USSR)

ABSTRACT: Experimental investigations have shown that the values of the filtration coefficient in concrete dams and cracked rock grounds are commensurate and are of the order of 10^{-4} to 10^{-9} cm/sec. The author investigated the problem of filtration in concrete dams with the aid of an integrator of the ЕГДА -6/53 type in the Institute of Mathematics of the AN Ukrainian SSR under supervision of P.F. Fil'chakov. The author came to the conclusions that when the filtrative capacity is taken into account, the action of water on the concrete carcass should be re-considered and effects of various anti-filtrative measures should be re-evaluated. Another conclusion arrived at is that the linear law of pressure distribution along the dam base, commonly used at present in calculations , proves to be only a first approximation. However, deviations from

Card 1/2

Counterpressure on the Base of Concrete Dams Constructed on Foundations of Insignificant Porosity

this law do not exceed 8%. The data of observation (Ref.3) also confirm the curvilinear law of pressure distribution. The article contains 1 table and 6 Slavic references.

ASSOCIATION: Stalingrad Institute of Engineers of Local Economy (Stalinhrads'kyy instytut inzheneriv mis'koho hospodarstva)

PRESENTED: By G.N. (H.M.) Savin, Member of the AN Ukrainian SSR

SUBMITTED: 25 January 1957

AVAILABLE: Library of Congress

Card 2/2

SOV/124-58-4-4334

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 92 (USSR)

AUTHOR: Savinov, S. F.

TITLE: The Seepage of Water in Concrete Dams on Foundations of Small Permeability in the Presence of Drainage Provisions (Fil'tratsiya vody v betonnykh plotinakh na malopronitsayemykh osnovaniyakh pri nalichii drenazhnykh ustroystv)

PERIODICAL: Tr. Gor'kovsk. inzh.-stroit. in-ta, 1957, Nr 26, pp 63-89

ABSTRACT: The article represents a broad experimental investigation devoted to the study of the influence of various drainage provisions (such as horizontal shafts, vertical drainage of the high-pressure side, drainage of foundation) on the character of the water seepage through the body of concrete dams. Considering the water seepage through the concrete as obeying the Darcy law and taking the concrete as a uniform material, the author has performed a considerable amount of investigations on the EGDA (electrohydrodynamic analog) equipment. Considerable influence of the horizontal shafts has been found on the seepage conditions through the body of the dam. As a result thereof it is recommended that the horizontal shafts be located closer to

Card 1/2

SOV/124-58-4-4334

The Seepage of Water in Concrete Dams (cont.)

the base of the dam, at a distance 0.2 of the dam width from the high-pressure side. The author proves the great and favorable influence of vertical drainage on the elimination of the water saturation of the dam. The diameter of drainage shafts is recommended to be equal to 0.25 m with the distance between the shafts of not more than 1.5 - 2.0 m. Detailed studies have been made on the subject of the influence of bottom drainage on the back pressure and on the reduction of exit gradients of the seepage flow. A number of suggestions relative to details of construction are offered with respect to the rational distribution of drainage provisions within the base of a concrete dam. The article gives approximate formulas for construction of graphs showing the back-pressure distribution in the presence of drainage provisions within the base.

A. A. Uginchus

1. Dams--Physical properties 2. Water--Penetration 3. Drainage--Effectiveness

Card 2/2

14(6) SOV/98-59-4-10/17

AUTHOR: Savinov, S.F., Engineer

TITLE: Counter-Pressure Exerted on Concrete Dams With Concrete Penetrability Taken Into Account (Protivodavleniye na betonnyye plotiny s uchëtom pronitsayemosti betona)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 4, pp 40-42 (USSR)

ABSTRACT: The article deals with testing the water filtration in concrete dam models having at their base an underground passage as well as a flat drainage system. The tests were carried out by an EGDA-6/53-type integrator designed by P.F. Fil'chakov and V.I. Panchishin. The proposed formulae and tables enable a quick determination of the counter-pressure exerted on the dam's spillway, which is important for the calculation of the dam's static stability and the length of its underground contour line. Should the underground contour line be definitely drafted, the

Card 1/2

Counter-Pressure Exerted on Concrete Dams With Concrete Penetrability Taken Into Account

counter-pressure must be determined by the EGDA-method, which implies that the concrete penetrability must be taken into consideration. There are 2 diagrams and 3 tables.

Card 2/2

SAVINOV, S., inzh.

Machinery for completing holes and trenches. Zhil.stroi. no.4:31 Ap '60. (MIRA 13:8)
(Excavating machinery)

SAVINOV, S.

Moscow exhibition of new building technology. Zhil. stroi. no.9:29-30 S '60. (MIRA 13:9)
(Moscow--Building--Exhibitions)

SAVINOV, S.G., inzh.

Making precast reinforced concrete products in tipping forms.
Biul.stroi.tekh. 12 no.8:1-4 Ag '55. (MIRA 12:1)
(Concrete construction--Formwork)

SAVINOV, S.G., inzh.

Chamberless steaming of multihollow reinforced concrete slabs.
Biul.stroi.tekh. 12 no.10:14-15 O '55. (MIRA 12:1)
(Concrete slabs)

SAVINOV, S.

Balance grab for hoisting large brick blocks. Stroitel' 2 no.2:16 F '56. (MLRA 9:12)
(Hoisting machinery)

SAVINOV, S.

Equipment for brick-block laying. Stroitel' 2 no.6:10-11 Je '56.
(Bricklaying) (MLRA 10:1)

SAVINOV, S.

Efficiency suggestions of electrician I.Proshkin. Stroitel' 2 no.7:19 Jl '56. (MLRA 10:1)

1. Starshiy inzhener nauchno-issledovatel'skoy stantsii Glavmosstroya. (Drilling and boring machinery)

SAVINOV, S.

New building equipment at the Moscow exhibition in 1956.
Stroitel' 2 no.8:24-27 Ag '56. (MLRA 9:12)
(Moscow--Building machinery--Exhibitions)

SAVINOV, S.

123-1-721

Translation from: Referativnyy Zhurnal, Mashinostroyeniya, 1957, Nr 1, p. 109 (USSR)

AUTHOR: Savinov, S.

TITLE: General-purpose Portable Wood-working Machine Tool (Universal'nyy perenosnyy derevoobdelochnyy stanok)

PERIODICAL: Sel'skiy stroitel', 1956, Nr 3, pp. 26-28; Sel'skoye stroitel'stvo, 1955, Nr 9, pp. 13-14

ABSTRACT: A general-purpose portable woodworking machine tool designed by Nikulin, G. F., for cabinet-making, sawing, cutting tenons, planing, etc. is described. This machine is powered by an 2.5 to 2.8 kw electric motor with a belt drive. Its working shaft has a speed range from 3,500 to 6,100 RPM to suit the various requirements of operation by changing the pulley of the motor. This machine tool is equipped with several auxiliary attachments which enlarge its field of application

Ya.A.F.

Card 1/1

SAVINOV, S.G., inzhener.

Conveying bricks from the brick factory to the construction site by means of pallets on trays. Biul.stroi.tekh.13 no.3:6-9 Mr '56. (MLRA 9:7)

1.Nauchno-issledovatel'skiy sektor Glavmosstroya.
(Bricks--Transportation)

SAVINOV, S.G., inzhener.

Economizing binding materials in facing work. Biul.stroi.tekh.13 no.10:24-26 O '56. (MLRA 10:1)

1. Nauchno-issledovatel'skaya stantsiya Glavmosstroya.
(Binding materials) (Facades)

SAVINOV, S.G.

Improving the machinery and equipment for transporting brick with I.P. Shirkov's method. Gor.khoz.Mosk. 30 no.4:26-28 Ap '56. (MLRA 9:8)

1. Starshiy inzhener Normativno-issledovatel'skoy stantsii Glavmosstroya.

(Bricks--Transportation)

SAVINOV, S.

Precast elements for apartment houses. Stroitel' no.1:20 Ja '57. (MLRA 10:2)

(Precast concrete)

SAVINOV, S.G., inzhener.

Machinery and devices used in building and road construction.
Gor.khoz.Mosk. 31 no.1:9-13 Ja '57. (MLRA 10:3)
(Road machinery) (Building machinery)

SAVINOV, S., inzh.

Assembling large-panel apartment houses according to hourly work schedules. Na stroi. Mosk. 1 no.8:5-8 Ag '58. (MIRA 11:10)
(Moscow--Apartment houses)

SAVINOV, S.G., inzh.

New building machinery at the Moscow exhibition in 1957. Gor. khoz. Mosk. 32 no.1:18-21 Ja '58. (MIRA 11:1)
(Moscow--Building machinery--Exhibitions)

SAVINOV, S.G., inzh.

Building machinery and equipment at the exhibition of 1958. Gor. khoz. Mosk. 32 no.9:15-18 S '58. (MIRA 11:9)
(Moscow--Building machinery--Exhibitions)

MERKLING, M.I., inzh.; SAVINOV, S.G., inzh.; STARUKHIN, N.M., inzh., nauchnyy red.; TYULENEVA, L.M., red.izd-va; OSENKO, L.M., tekhn.red.

[Laying plank and parquet floors] Ustroistvo doshchatykh i parketnykh polov. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 155 p. (MIRA 13:2)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. (Floors)

SAVIKOV, S.

The first large-panel house in Angarsk. Na stroi.Mosk. 2 no.6:30 Je '59. (MIRA 12:8)
(Angarsk--Apartment houses)

SAVINOV, S., inzh.

At the Moscow exhibition of new building technology in 1959. Na stroi.Mosk. 2 no.8:15-17 Ag '59. (MIRA 12:12)
(Moscow--Building--Exhibitions)

SAVINOV, S., inzh.

At the Moscow exhibition of new building machinery in 1959.
Na stroi. Mosk. 2 no.9:14-15 S '59. (MIRA 13:2)
(Moscow--Building machinery--Exhibitions)

SAVINOV, S.G., inzh.

For over-all mechanization of building operations. Gor.khoz.Mosk. 33 no.9:10-15 S '59. (MIRA 12:11)
(Moscow--Building machinery--Exhibitions)

SAVINOV, S.G., inzh.

Brigades of communist labor on the construction sites. Gor. khoz. Mosk. 34 no.1:27-28 Ja '60. (MIRA 13:5)
(Moscow--Building)

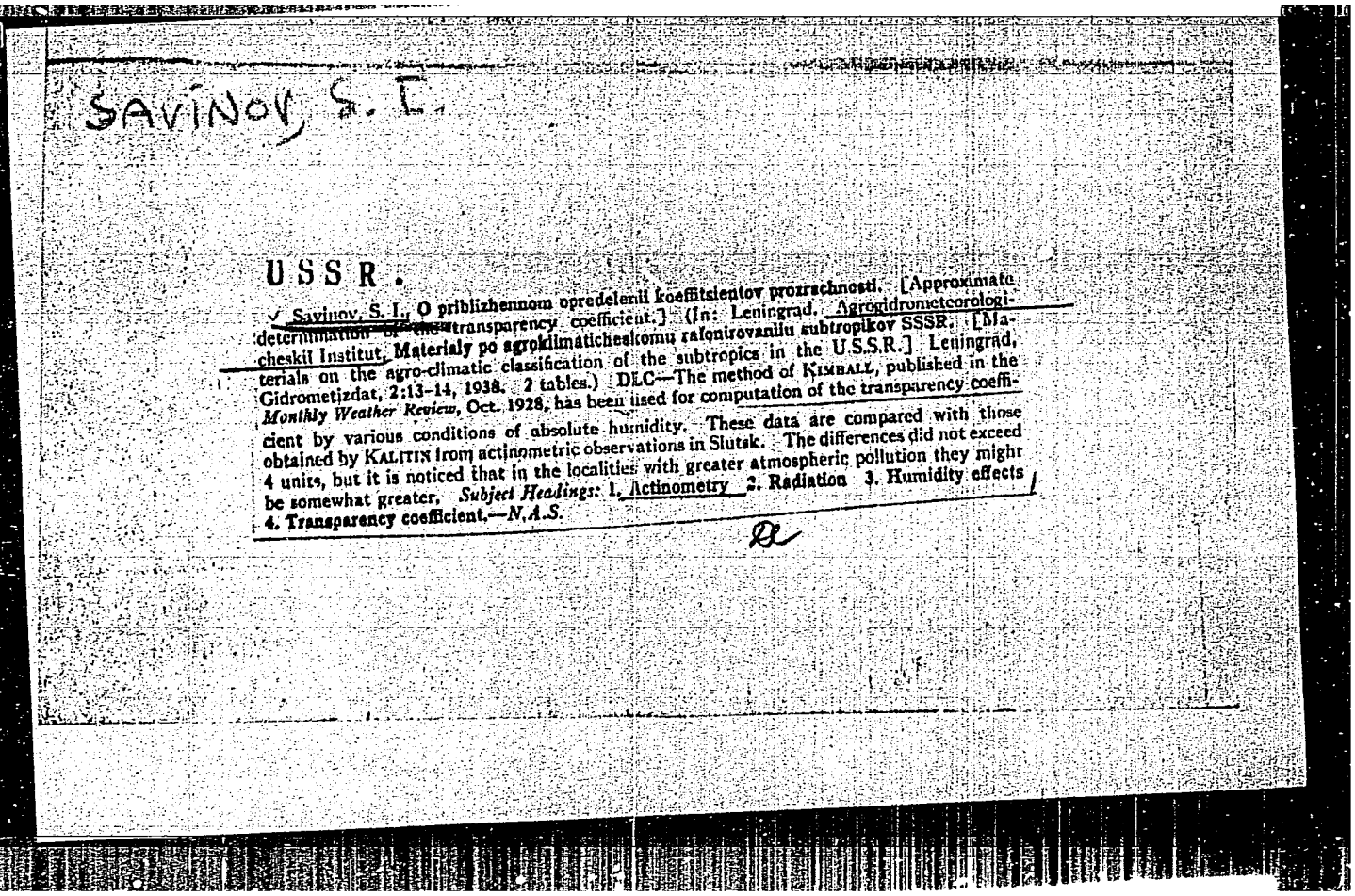
DUBROVKIN, S.D., inzh.; BULYCHEV, G.G., doktor tekhn. nauk, nauchnyy red. SAVINOV, S.G., red.; KARPOVA, Ye.A., tekhn. red.

[Study of the characteristics of plastic pipe laying in water supply and sewer systems in apartment houses.] Issledovaniia osobennostei prokladki plastmassovykh trubo-provodov v sistemakh vodosnabzheniia i kanalizatsii zhilykh zdanii, Moskva, Sviaz'izdat, 1961. 49p. (Moscow. Glavnoe upravlenie po zhilishchnomu i grazhdanskomu stroitel'stvu. Nauchnoe soobshchenie, no. 32). (MIRA 16:11)

MERKLING, M.I., inzh.; SAVINOV, S.G., inzh.; ODINOKOV, S.D., kand. tekhn. nauk, nauchnyy red.; TABUNINA, M.A., red.izd-va; IGNAT'YEV, V.A., tekhn. red.

[Laying plank and parquet floors] Ustroistvo doshchatykh i parketnykh polov. Izd.2., ispr. i dop. Moskva, Gos.izd-vo lit-ry po stroit.arkhit. i stroit. materialam, 1961. 159 p. (MIRA 14:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.
(Floors)



SAVINOV, S. I.

USSR.

✓ Savinov, S. I., O priblizhennom opredelenii koeffitsientov prozrachnosti. [Approximate determination of the transparency coefficient.] (In: Leningrad. Agrogidrometeorologicheskii Institut. Materialy po agroklimaticheskomu raĭonirovaniiu subtropikov SSSR. [Materials on the agro-climatic classification of the subtropics in the U.S.S.R.] Leningrad, Gidrometizdat, 2:13–14, 1938. 2 tables.) DLC—The method of KIMBALL, published in the *Monthly Weather Review*, Oct. 1928, has been used for computation of the transparency coefficient by various conditions of absolute humidity. These data are compared with those obtained by KALITIN from actinometric observations in Slutsk. The differences did not exceed 4 units, but it is noticed that in the localities with greater atmospheric pollution they might be somewhat greater. *Subject Headings:* 1. Actinometry 2. Radiation 3. Humidity effects 4. Transparency coefficient.—*N.A.S.*

SAVINOV, S. I.

Savinov, S. I. - "On the problem of leaf actinometers of the 'Mikhel' type", Trudy Glav. geofiz. observatorii, Issue 14, 1949, p. 5-20, - Bibliog: 7 items.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

SAVINOV, S. I.

33066

Fauna verkhnikh svit srednego I nizov verkhnego karbona zhirnovskogo Podnyetiye Stalingradskoy Oblasti. Doklady Akad. Nauk Sssr. Novay Seriya, T. lxix, No 1, 1949, c. 65-67

SO: Letopis' Zhurnal nykh Statey, Vol. 45, Moskva, 1949

SAVINOV, S.P.; ROGOVA, V.M.

Morphological studies of the cytopathogenic effect of poliomyelitis, Coxsackie, and ECHO viruses in tissue culture. Zhur.nevr.i psikh. 61 no.3:341-347 '61. (MIRA 14:7)

1. Laboratoriya patogistologii (zav.,- dotsent I.A.Robinzon) Instituta po izucheniyu poliomyelita (dir. - prof. M.P.Chumakov) AMN SSSR, Moskva.

(POLIOMYELITIS) (COXSACKIE VIRUSES)
(ECHO)

KOREMNOV, B., inzh.; SAVINOV, V.

Automatic temperature regulator with increased sensitivity.
Radio no.11:26-27 N '65. (MIRA 18:12)

SAVINOV, V.A.

Teplo-i massoobmen v merzlykh tolshchakh zemnoy kory (Heat and mass transfer in the Frozen Strata of the Earth's Crust) Moscow, Izd-vo AN SSSR, 1963 213p.
Research by the staff oc the Heat-and Mass-Transfer Division of the Institute of Permafrost Study, Siberian Branch, AS USSR.

Card 5/7

SAVINOV, V. A.

Trematoda

Skrjabinomerus petrovi nov. sp., a new trematode from the intestines of moles. Trudy Gel'm. lab. No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, UNCL.

SAVINKOV, V. [illegible]

Osobennosti razvitiya alaria alata (Goeze, 1782) v organizme definitivnogo i Rezervuarnogo khozyaev, "Works on Helminthology" on the 75th Birthday of K. I. Skryabin, Izdat, Akad. Nauk, SSSR, 1953, page 611

Chair Zoology, Kalinin State Pedagogical Inst.

SAVINOV, V.A.

SAVINOV, V.A., kand. biol. nauk.

Development of Alaria alata (Goeze, 1782) in the body of the dog. (MIRA 11:1)
Trudy VIGIS 5:63-64 '53.
(Parasites--Dogs) (Trematoda)

Q

Country : USSR
CATEGORY : Farm Animals. Silkworm

ABS. JOUR. : RZBiol., No. 13, 1958, No. 59672

AUTHOR : Savinov, V. A.
INST. : -
TITLE : On the Possibility of the Cultivation of the Chinese Oak-Feeding Silkworm under Conditions of Vologodskaya Oblast

ORIG. PUB. : Tr. nauchn. konferentsii po izuch. Vologodsk. obl., Vologda, 1956, 250-255

ABSTRACT : The raising of the bivoltine form of silkworm and the obtaining of wintering cocoons (breeding material) on birch leaves is perfectly possible if the feeding period is no longer than five months. In propitious years, two generations can be reared on fresh leaves. The larvae of the 2nd generation of any stage except the first one can be fed supplementarily with dry leaves prepared in the summer and soaked in cold water. At optimal temperature and humidity, and with good ventilation, it is possible to attain normal periods

CARD: 1/2

Q

COUNTRY : USSR
CATEGORY : Farm Animals. Silkworm

SAVINOV, V.A.

P-2

USSR/Zooparasitology - Parasitic Worms

Abs Jour : Referat Zhur - Biologii, No 16, 1957, 70158

Author : Petrov, A.M., Savinov, V.A.
Title : The Helminthic Fauna of Moles from the Vologod Region

Orig Pub : sb. rabot. Vologod, 1956, vyp. 3, 107-115

Abstract : The helminthic fauna of moles from the Vologod region (52 cases found) includes 10 forms: Skrjabinomerus perrovi, Ithyogonimus talpae, Metacircaria Alaria alata, (trematoda) Hymenoleptididae gen. sp. (cestoda), Parastrongyloides Skrjabini, Longistriata vigisi, the larvae of Porrocaecum sp., Thominx hepatica, Th. marii, and Capillaria sp. (Nematoda). The similarity of Vologodov and Kalinin regions was noted, (in helminthofauna).

Card 1/1

- 7 -

SAVINOV, Vyacheslav Alekseyevich; LOBANOV, Antoniy Nikolayevich; PUDOZHGORSKIY, V.K., red.

[Wild animals of Vologda Province] Zveri Vologodskoi oblasti. Vologodskoe knizhnoe izd-vo, 1958. 206 p. (MIRA 12:2)
(Vologda Province--Animals)

PETROV, A.M., prof., doktor veterinarnykh nauk; SAVINOV, V.A., kand. biologicheskikh nauk

Helminths of moles (Talpa europaea L.) in Kalinin Province. Trudy VIGIS 6:160-166 '59. (MIRA 15:5)
(Parasites--Moles (Animals))
(Kalinin Province--Worms, Intestinal and parasitic)

SAVINOV, V. A.

"Some General Patterns of the Phasic Development of Helminths."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

The Kalinin State Pedagogical Institute

SAVINOV, V.A.

New trematode Hyptiasmus vigisi nov. sp. from the nasal cavity of the scaup duck. Nauch. trudy Kal. otd. MOIP no.2:74-77 '60. (MIRA 14:10)

(PARASITES--DUCKS)
(KUBENO-OZERSKIY DISTRICT--TREMATODA)

SAVINOV, V.A.

Description of Capillaria talpae Siebold, 1850, Travassos, 1915 parasitic in moles. Nauch. trudy Kal. otd. MOIP no.2:78-81 '60. (MIRA 14:10)

(NEMATODA) (PARASITES--MOLES)

SAVINOV, V.A.

Experimental study of possible infestations of mammals with the cercariae of Alaria alata. Nauch. trudy Kal. otd. MOIP no.2:82-88 '60. (MIRA 14:10)

(TREMATODA)

SAVINOV, V.A.; BELOBORODOVA, G.A.

Effect of the length of time passed by larvae of the horse ascarid in the external environment on their migration in transitional hosts. Nauch. trudy Kal. otd. MOIP no.2:89-95 '60. (MIRA 14:10)
(ASCARIDS AND ASCARIASIS)

SAVINOV, V.A.; GOLOVIN, O.V.

Trichinosis in wolves and helminths of predatory animals in Kalinin Province. Nauch. trudy Kal. otd. MOIP no.2:97-99 '60. (MIRA 14:10)

(KALININ PROVINCE--WORMS, INTESTINAL AND PARASITIC)
(PARASITES--CARNIVORA)

1. SAVINOV, V. G.; TRET'YAKOVA, G. S.

2. USSR (600)

4. Vitamins

7. Bromination of carotene with N-bromosuccinimide. Ukr. khim. zhur. 17, No. 4, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

SAVINOV, V.G., professor, doktor tekhnicheskikh nauk.

Carotene. Nauka i zhizn' 21 no.12:15-16 D '54. (MIRA 8:1)
((Carotene)

SAVINOV, V. K.

SAVINOV, V. K. -- "TEMPERATURE CONDITIONS OF THE METAL IN PIPES DURING THE BOILING OF HIGH-EFFERVESCENT ORGANIC HEAT CARRIERS." SUB 20 JUN 52, POWER ENGINEERING INST IMENI G. M. KRZHIZHANOVSKIY, ACAD SCI USSR (DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

SAVINOV, V.M., nauchnyy sotrudnik; SOKOLOV, L.B., nauchnyy sotrudnik

Use of plastics for manufacturing loom shuttles; review of foreign publications. Tekst.prom. 21 no.12:78-79 D '61. (MIRA 15:2)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol.

(Looms)
(Plastics)

L 23075-66 EWT(m)/EWP(j)/T WW/RM

ACC NR: AP6010104 (A) SOURCE CODE: UR/0190/66/008/003/0380/0386

AUTHORS: Krasnov, Ye. P.; Savinov, V. M.; Sokolov, L. B.; Loginova, V. I.; Belyakov, V. K.; Polyakova, T. A.

ORG: Vladimir Scientific Research Institute of Synthetic Resins (Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol)

TITLE: Thermal degradation of isomeric aromatic polyamides

SOURCE: Vysokomolekulyarnyye soyednieniya, v. 8, no. 3, 1966, 380-386

TOPIC TAGS: polyamide, terephthalic acid, pyrolysis, discarbolic acid, isomer, thermal stability, thermal effect, mass spectrometry, chromatographic analysis, heat resistance

ABSTRACT: A thermal decomposition in vacuo of four isomeric aromatic polyamides based on phenylenediamines and terephthalic acids has been investigated. The composition of the gaseous and liquid products of the polyamides pyrolysis was analyzed by means of mass spectrometry and gas liquid chromatography. It was shown that the heat resistance of polyamides greatly depends on the isomeric form of the starting phenylenediamines and dicarboxylic acids. The polyamide chain is the most stable with para-isomers and the least stable with metha-isomers.

UDC: 678.01:54+678.675

Card 1/2

L 23075-66

ACC NR: AP6010104

On the basis of kinetic data and the results of the parolysis product analysis, the causes were suggested that for different thermal stabilities of polyamides and for the thermal decomposition of isomeric aromatic polyamides. Orig. art. has: 5 figures and 2 tables. [Based on author's abstract] [NT]

SUB CODE: 07, 11/ SUBM DATE: 01Feb65/ ORIG REF: 006/
OTH REF: 006/

Card 2/2 JCR

L 10420-67 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6029917 (A) SOURCE CODE: UR/0413/66/000/015/0088/0088

AUTHORS: Savinov, V. M.; Sokolov, L. B.; Lebedev, A. I.

ORG: none

TITLE: A method for obtaining polyamides. Class 39, No. 184441 [announced by Vladimir Scientific Research Institute of Synthetic Resins (Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 88

TOPIC TAGS: polyamide, polycondensation, emulsion

ABSTRACT: This Author Certificate presents a method for obtaining polyamides by polycondensation of dichloranhydrides of acids and diamines in a solution or emulsion. To complete the technological process, one of the monomers is taken in excess and is gradually introduced into the reactive zone.

SUB CODE: 07 / SUBM DATE: 24Apr64

UDC: 678.675

Card 1/1

15 8080 2209 1372 2409

27350
S/080/61/034/009/012/015
D204/D305

AUTHORS: Savinov, V.M., and Sokolov, L.B.

TITLE: The synthesis of some diamino-ethers and polyamides based on them

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 9, 1961, 2124 - 2125

TEXT: The problem was to obtain heat-stable polymers (e.g. polyamides with aromatic nuclei in the chain) by a convenient method. The presence of aromatic nuclei in the polymer chain gives rise to increased hardness which cancels out some good mechanical properties of polymers. One of the methods of reducing this hardness is to introduce a simple ether bond in the polymer chain. This is usually effected by synthesis from monomers which contain the simple ether bond. The more expensive β, β'-di-iodo-diethyl ether was replaced by "chlorex" -β,β'-dichlorodietnyl ether. A 45-50 % yield was obtained, the method used being briefly described as follows:

Card 1/3

27350
S/080/61/034/009/016/016
D204/D305

The synthesis of some diamino-ethers...

A mixture of potassium phthalimide and "chlorex" was refluxed for 5-6 hours at 160-180° to obtain a viscous, brown mass which solidified on cooling. The water-soluble constituents were removed by boiling, and the residue consisting essentially of β,β'-diphthalimido-ethyl ether was extracted with alcohol, from which a fine grey powder was deposited. This was recrystallized from alcohol and then converted the chlorhydrate of β,β'-diaminodiethyl ether (Compound I) by allowing it to stand in contact with potassium hydroxide solution for 2-3 days, the solution being heated to dryness and finally neutralized with HCl. 4,4'-diaminodiphenyl ether (Compound II) was prepared by the traditional method of reducing the dinitrodiphenyl compound with tin and hydrochloric acid. The chlorhydrate of this compound had m.p. 185-186°. Polyterephthalimides were obtained by the interphase polycondensation method. The hydrochloride of compound I was used, and compound II being a weaker base was subjected to polycondensation with the chloranhydride of terephthalic acid. Tables are given of relationships of viscosity and yield of polyphthalimide based on compound I to

Card 2/3

The synthesis of some diamino-ethers...

quantity of alkali in the aqueous phase; and based on compound II to pH value of the medium. Thermomechanical tests showed that the polyamide based on compound I softens in the temperature range 200-230° and begins to melt above 260°, the polyamide based on compound II has a m.p. above 340°. Compounds with the simple ether bond as described are compared with those containing the methylene group. There are 2 tables, 1 figure, and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: V.S. Shashoua and W.M. Eareckson, J. Polymer Sci., XL, 343, 1959.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh smol. g. Vladimir (Scientific Research Institute of Synthetic Resins g. Vladimir)

SUBMITTED: November 4, 1960

Card 3/3

SAVINOV, V.M.; SOKOLOV, L.B.

Synthesis of high-molecular weight polyesters of oxalic acid. (MIRA 16:12)
Plast. massy no.11:65-67 '63.

SAVINOV, V.M.; SOKOLOV, L.B.; FEDOROV, A.A.

Effect of the acidity of diols on the hydrolytic stability of oxalic acid polyesters. Vysokom. soed. 6 no.7:1335-1339 Jl '64 (MIRA 18:2)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol.

L 57057-65 EPF(c)/EWP(j)/EWT(m)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5013051 UR/0190/65/007/005/0772/0777

678.675

AUTHORS: Savinov, V. M.; Sokolov, L. B.

TITLE: Some specific features in the synthesis of aromatic polyamides in amic solvents

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 5, 1965, 772-777

TOPIC TAGS: organic synthesis, aromatic polyamide, polymerization

ABSTRACT: The acylation of amines with acyl chlorides in dimethylformamide and dimethylacetamide was studied as part of an investigation on possible use of these solvents for synthesizing polyamides. The use of mixed solvents in the synthesis was also studied. Preliminary solution of the chlorides in dimethylacetamide and substitution of dimethylformamide for dimethylacedamide (because it is more accessible and cheaper) caused a sharp decrease in molecular weight of the polymer product. In the first case, the cause was found to be impurities: dimethylamine and water. Removal of the impurities solves this problem. For dimethylformamide it was found that side reactions are more aggressive than the main polymerization reaction, and for this reason this solvent must be considered

Card 1/2

L 57057-65

ACCESSION NR: AP5013051

unsuitable for producing molecules of high molecular weight. Partial substitution of chlorides of the diamines for the diamines proved to be possible without reduction of the molecular weight of the polymeric product. Complete replacement is not possible because of the limited solubility of the salts. This solubility may be improved, however, by using a solution containing the diamine in the solvent. In this way, up to 50% replacement was effected without reducing the weight of the resulting polymer. Increase in solubility of the salt is due to exchange of HCl between the salt and the diamine. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskikh smol, Vladimir (Scientific Research Institute of Synthetic Resins)

SUBMITTED: 12Jun64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 003 OTHER: 008

Card 2/2

SAVINOV, V.M.; SOKOLOV, L.B.

Obtaining the reaction sirups of aromatic polyamides suitable for the formation of fibers. Khim. volok. no.4:22-25 '65. (MIRA 18:8)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol.

SAVINOV, Vladimir Nikolayevich; GONCHAROVA, T., red.

[Wild animals and birds of the Altai] Zveri i ptitsy Altaia. Barnaul, Altaiskoe knizhnoe izd-vo, 1964. 131 p. (MIRA 18:3)

SAVINOV, V.P.

5

Electric properties of zinc telluride. B. T. Boltaks, O. N. Matveev, and V. P. Savinov. *Zhur. Tekh. Fiz.* 25, 2097–103(1955).—Measurements were made with ZnTe of stoichiometric compn., with 1% Te excess, and with 1% Se as impurity. The compds. were prepd. at 1300°, and the measurements were made with samples of 3 × 0 × 15 mm. The resistivity was measured from room temp. up to 600°. The pure compd. shows a distinct break in the log ρ vs. 1/T(°K.) curve; for the two branches the activation energy of the carrier current is 0.24 ± 0.03 and 0.65 ± 0.03 e.v.; resp. The coeff. of the thermal e.m.f. has a max. at about 600° for the pure sample, the one with Te excess did not show a max., but the one with Se showed 2 max. The amt. of holes (lattice disturbances) was measured from room temp. to 220° and also the mobility thereof (carrier current). The curves for the three materials go more or less parallel to each other.

Werner Jacobson

EL

SAVINOV, V.P.

D 4

Category : USSR/Atomic and Molecular Physics - Heat

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6278

Author : Dul'nev, G.N., Savinov, V.P.
Title : On the Accuracy of Temperature Measurement with Semiconductor Heat-Sensitive Resistances.

Orig Pub : Issledovanya v oblasti tonlovykh. M.-L., Mashgiz, 1956, 150 158

Abstract : Analysis of the error occurring in the measurement of a temperature with the aid of semiconductor thermoresistences, due to overheating of these resistences by the passage of the measuring current that flows in an unbalanced Wheatstone bridge. A procedure is given for the design of the circuit for maximum sensitivity. Indications are given on the choice and calculation of the maximum permissible power dissipated in the thermoresistance and its connection with the overheating temperature. Curves are given to illustrate the dependence of the overheating temperature on the permissible dissipation power for various types of semiconductor thermoresistences.

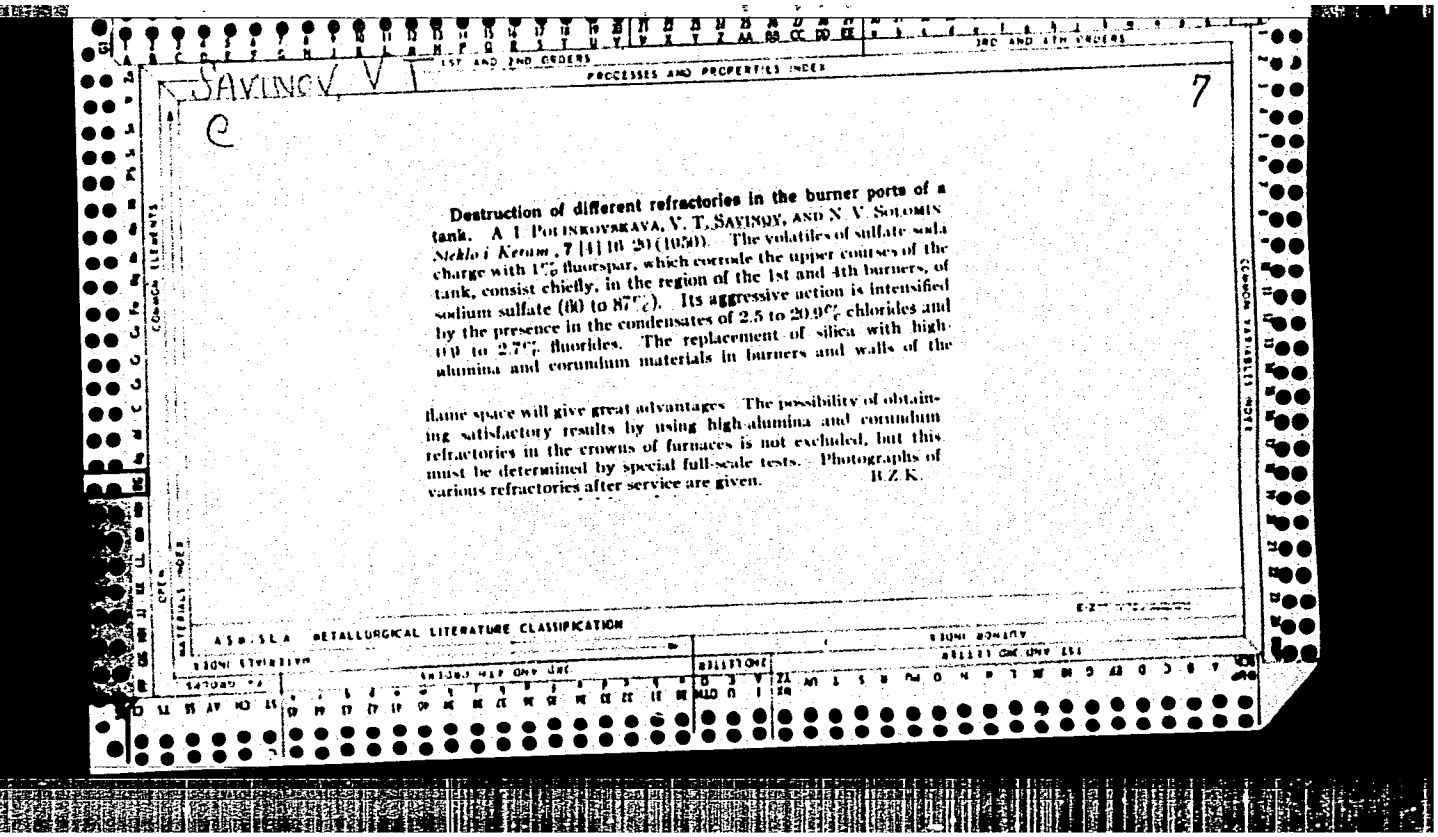
Card : 1/1

SAVINOV, V.P.

Instrument for measuring air moisture. Izv.vys.ucheb.zav.; prib. no.3:125-128 '58. (MIRA 12:2)

1. Starshiy inzh. Leningradskogo instituta tochnoy mekhaniki i optiki.

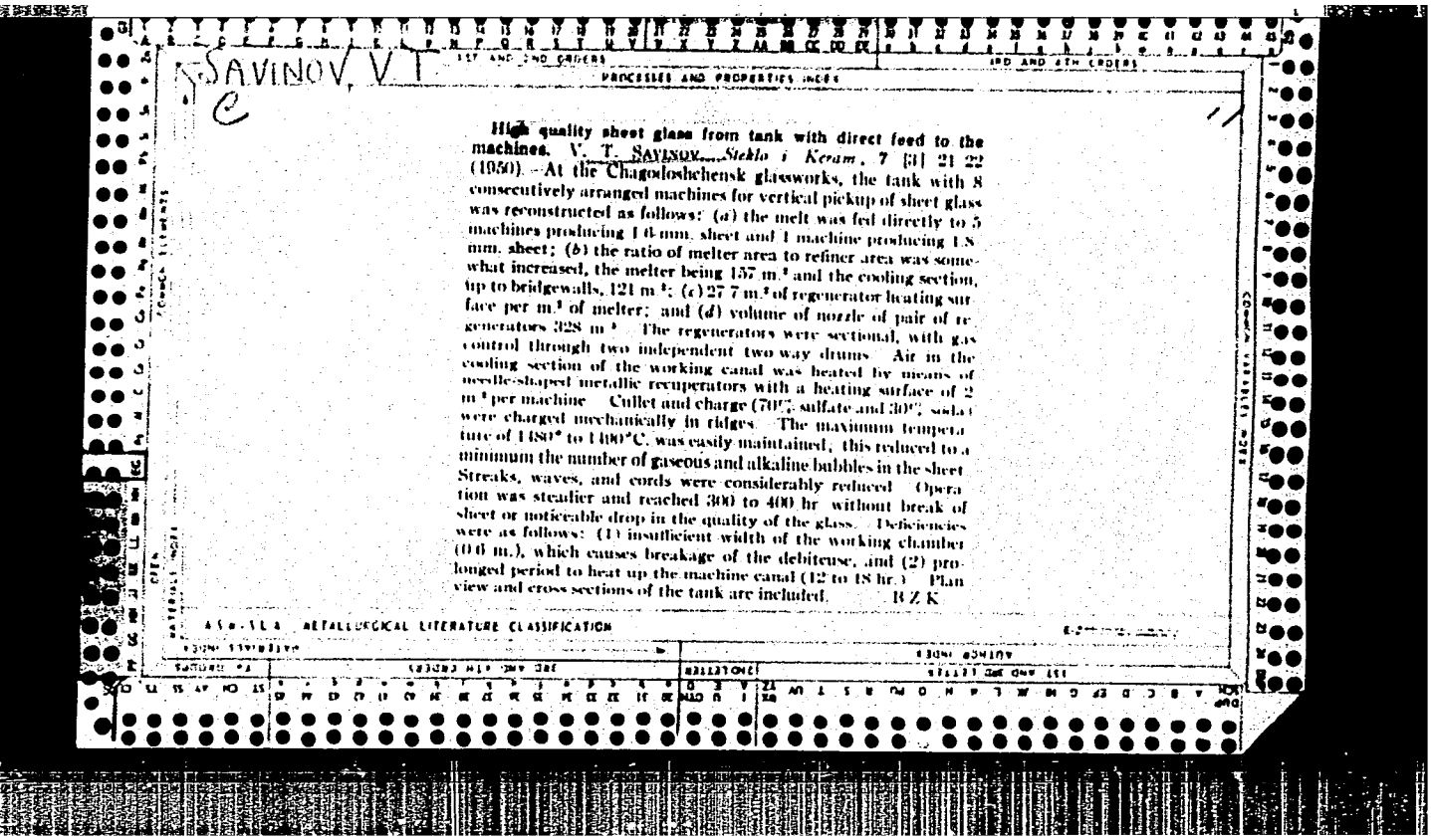
(Hygrometry)



SAVINOV V T

7

Destruction of different refractories in the burner ports of a tank. A I POLINKOVSKAYA, V. T. SAVINOV, AND N. V. SOLOMIN *Steklo i Keram.*, 7 [4] 18–20 (1950). The volatiles of sulfate-soda charge with 1% fluorspar, which corrode the upper courses of the tank, consist chiefly, in the region of the 1st and 4th burners, of sodium sulfate (60 to 87%). Its aggressive action is intensified by the presence in the condensates of 2.5 to 20.9% chlorides and 0.9 to 2.7% fluorides. The replacement of silica with high-alumina and corundum materials in burners and walls of the flame space will give great advantages. The possibility of obtaining satisfactory results by using high-alumina and corundum refractories in the crowns of furnaces is not excluded, but this must be determined by special full-scale tests. Photographs of various refractories after service are given. B Z K.

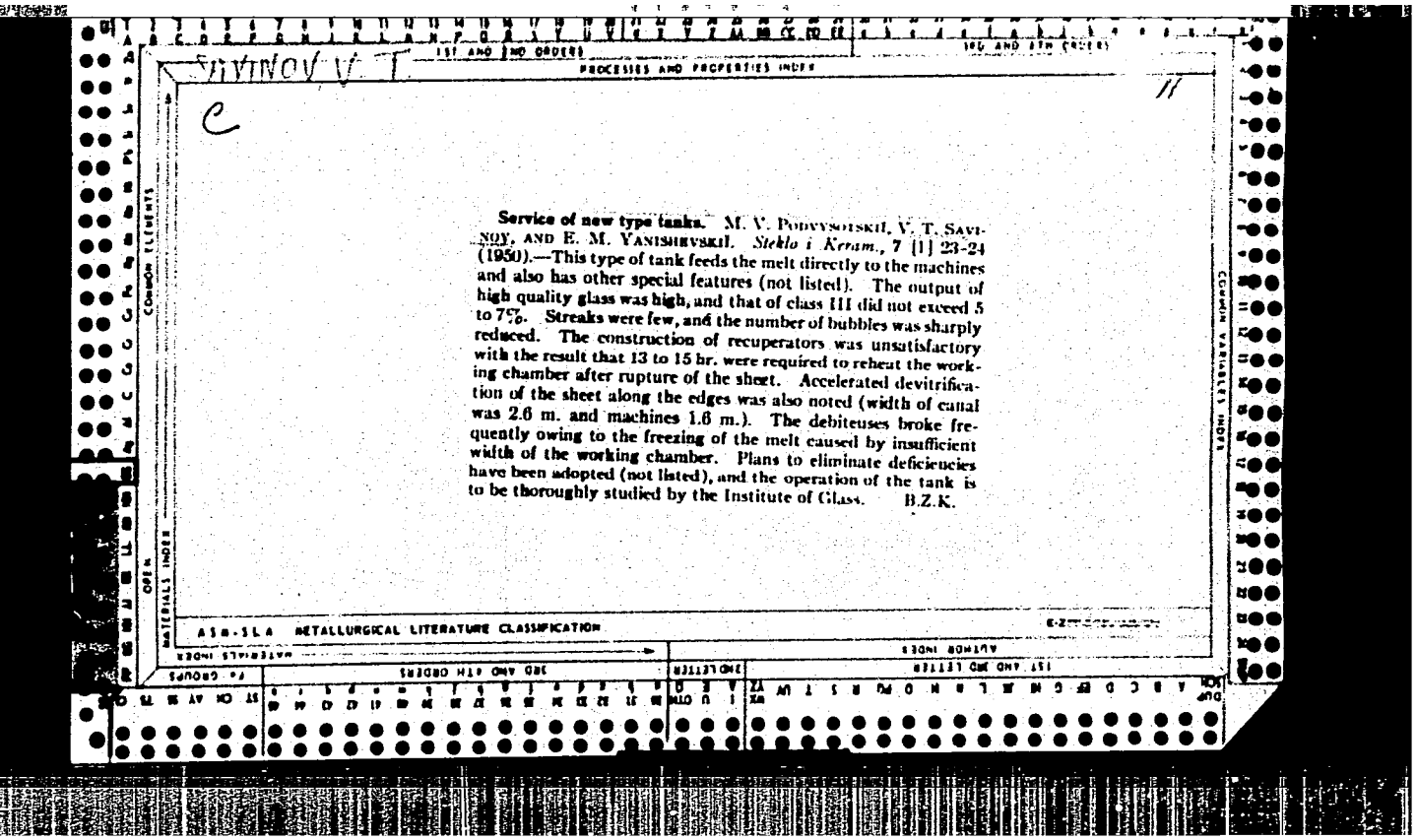


SAVINOV, V. T.

PROCESSES AND PROPERTIES INDEX

High quality sheet glass from tank with direct feed to the machines. V. T. SAVINOV. *Steklo i Keram.*, 7 [3] 21-22 (1950).—At the Chagoloshchensk glassworks, the tank with 8 consecutively arranged machines for vertical pickup of sheet glass was reconstructed as follows: (*a*) the melt was fed directly to 5 machines producing 1.6-mm. sheet and 1 machine producing 1.8-mm. sheet; (*b*) the ratio of melter area to refiner area was somewhat increased, the melter being 157 m.² and the cooling section, up to bridgewalls, 121 m.²; (*c*) 27.7 m.² of regenerator heating surface per m.³ of melter; and (*d*) volume of nozzle of pair of regenerators 328 m.³. The regenerators were sectional, with gas control through two independent two-way drums. Air in the cooling section of the working canal was heated by means of needle-shaped metallic recuperators with a heating surface of 2 m.² per machine. Cullet and charge (70% sulfate and 30% soda) were charged mechanically in ridges. The maximum temperature of 1480° to 1490°C. was easily maintained; this reduced to a minimum the number of gaseous and alkaline bubbles in the sheet. Streaks, waves, and cords were considerably reduced. Operation was steadier and reached 300 to 400 hr. without break of sheet or noticeable drop in the quality of the glass. Deficiencies were as follows: (1) insufficient width of the working chamber (0.6 m.), which causes breakage of the debiteuse, and (2) prolonged period to heat up the machine canal (12 to 18 hr.). Plan view and cross sections of the tank are included. B Z K

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION



Service of new type tanks. M. V. Podvysotskii, V. T. Savinov, and E. M. Yanishevskii. *Steklo i Keram.*, 7 [1] 23-24 (1950).—This type of tank feeds the melt directly to the machines and also has other special features (not listed). The output of high quality glass was high, and that of class III did not exceed 5 to 7%. Streaks were few, and the number of bubbles was sharply reduced. The construction of recuperators was unsatisfactory with the result that 13 to 15 hr. were required to reheat the working chamber after rupture of the sheet. Accelerated devitrification of the sheet along the edges was also noted (width of canal was 2.6 m. and machines 1.6 m.). The debiteuses broke frequently owing to the freezing of the melt caused by insufficient width of the working chamber. Plans to eliminate deficiencies have been adopted (not listed), and the operation of the tank is to be thoroughly studied by the Institute of Glass. B.Z.K.

L 26034-65 EWT(1)/EEC(b)-2/EWA(b) Pn-4/Pi-4/Peb

ACCESSION NR: AP5006753 S/0286/64/000/020/0035/0035

AUTHOR: Slavinskiy, Z. M.; Savinov, V. V.; Shekhodanov, M. P.; Ibragimov, Yu. M.

TITLE: Assembly head for automatic setting up of radio components with axial outlets for printed circuit boards. Class 21, No. 165896

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1964, 35

TOPIC TAGS: electronic component, automation, automation equipment

TRANSLATION: An assembly head for automatic setting up of radio components with axial outlets for printed circuit boards, containing a matrix and punch, inside of which is guides is installed a withdrawing device, differs in that (with the goal of an increase of the precision of assembly of radio components with an irregular geometrical form) the operational part of the matrix is given a cone-shaped form, and the inside of the withdrawing device arrangement is connected with it by means of a spring fork. Orig. art. has: 1 figure.

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po elektronnoy tekhnike (Organization of the State Committee on Electronic Engineering)

SUBMITTED: 11Jan63 ENCL: 00 SUB CODE: IE, EC

NO REF SOV: 000 OTHER: 000 JPRS

Card 1/1

KUZ'MINA, M.I.; SAVINOV, Ye.F.

Materials on the ecology of the snow partridge (Tetraogallus himalayensis Sewertzowi Zar.) in the Trans-Ili Ala-Tau. Zool.zhur. 32 no.6:1234-1240 N-D '53. (MLRA 6:12)

1. Institut zoologii Akademii nauk Kazakhskoy SSR.
(Trans-Ili Ala-Tau--Partridges) (Partridges--Trans-Ili Ala-Tau)

SAVINOV, Ye.F.

Nesting of the red-breasted merganser (Mergus serrator L.) on an island in Lake Balkhash. Trudy Inst.zool.AN Kazakh.SSR 4:240-242 '55. (MLRA 10:1)

(Kashkan-Tyubek, Island--Mergansers)

SAVINOV, Ye.F.

Propagation and growth of the Asiatic ibex Capra sibirica alaiana Noack in the Dzungarian Ala-Tau (Kazakhstan). Trudy Inst. zool. AN Kazakh. SSR 17:167-182 '62. (MIRA 17:2)

SAVINOV, Ye.F.

Migrations and diurnal activity of Asiatic ibex in Kazakhstan.
Trudy Inst. zool. AN Kazakh. SSR. 23:197-207 '64.
(MIRA 17:11)

LUKIRSKIY, A. P.; SAVINOV, Ye. P.

Monochromator with a rotating diffraction grating for ultra-soft X radiation. Opt. i spektr. 13 no.6:846-848 D '62.
(MIRA 16:1)

(Monochromator) (X rays)

S/051/63/014/002/016/026
E039/E120

AUTHORS: Lukirskiy, A.P., and Savinov, Ye.P.

TITLE: The use of diffraction gratings and echelettes in the ultra-soft X-ray region

PERIODICAL: Optika i spektroskopiya, v.14, no.2, 1963, 285-294

TEXT: Diffraction gratings and echelettes cut in glass are investigated with the object of finding the optimum conditions for their use. All the gratings and echelettes have 600 lines/mm and were made in the Gosudarstvennyy opticheskiy institut (State Optical Institute). Coefficients of reflection are determined for monochromatic lines at 23.6, 34.4, 44, 67 and 113 Å. The theory of reflection from gratings and echelettes is developed and compared with experimental results. It is shown that while the optimum conditions for ruling a grating or echelette for a particular wavelength can be calculated, if the coefficient of reflection is required over a wide range of wavelengths it must be determined experimentally. Echelettes give a lower reflection coefficient than gratings for wavelengths less than 60 Å while for wavelengths greater than 100 Å the converse is true.

Card 1/2

The use of diffraction gratings ... S/051/63/014/002/016/026
E039/E120

There are 8 figures and 2 tables.

SUBMITTED: March 16, 1962

Card 2/2

S/051/63/014/002/017/026
E039/E120

AUTHORS: Lukirskiy, A.P., and Savinov, Ye.P.

TITLE: The reflection of ultra-soft X-rays from glass and titanated surfaces

PERIODICAL: Optika i spektroskopiya, v.14, no.2, 1963, 295-298

TEXT: The object of coating a glass surface with a metallic layer is to exclude fine structure arising on reflection. Ti was found to be superior to Cr and Au in this respect. The absorption edge for Ti is located at 27.29 Å, hence for wavelengths greater than 30 Å fine structure in the reflection coefficient is excluded. The reflection coefficient was determined for a glass mirror (glass Ф-1 (F-1) on which diffraction gratings are cut) and also for a Ti surface, prepared by evaporation in a vacuum. The apparatus used consisted of a monochromator, goniometric apparatus for obtaining reflection at different angles, and two Geiger counters; one for recording the intensity of incident radiation and the other for the reflected radiation. An X-ray tube was used as a source and the measurements were made at wavelengths corresponding to the K series of O, N, C, B, and Be at

23.6, 31.4, 44, 67 and 113 Å respectively. For all wavelengths except 31.4 Å a larger reflection coefficient is observed for the Ti surface than for glass. The fall in reflection coefficient at 31.4 Å is due to the proximity of the absorption edge. It follows that coating a grating with Ti will exclude fine structure in its reflection coefficient for wavelengths greater than ~30 Å without detracting from its performance as a grating and will also increase its reflection coefficient.
There are 4 figures.

SUBMITTED: March 16, 1962

L 11428-65 EWT(l)/EWG(k)/EWT(m)/EPA(sp)-2/EPF(n)-2/EPR/EPA(w)-2/EEC(t)/T/
EWA/EWP(b) Pz-6/Pab-10/Ps-4/Pu-4 IJP(c) AT/JD/JG
ACCESSION NR: AP4048401 S/0181/64/006/011/3279/3287

AUTHORS: Savinov, Ye. P.; Lukirskiy, A. P.; Shepelev, Yu. F. B

TITLE: Concerning the external photoeffect of metallic photocathodes for radiation with wavelength 23.6--113 Angstrom

SOURCE: Fizika tverdogo tela, v. 6, no. 11, 1964, 3279-3287

TOPIC TAGS: x ray irradiation, photoeffect, secondary electron, angular distribution, aluminum, gold

ABSTRACT: The x-ray photoeffect was investigated in the ultrasoft region of the spectrum with an aim at determining the dependence of the quantum yield on the angle of incidence of the radiation on the photocathode, and at measuring the quantum yields of various substances. The monochromatic K_α lines of O, N. C, B, and Be and photocathodes of Al and Au were used. The procedure used to determine

Card 1/3

L 11428-65
ACCESSION NR: AP4048401

the absolute quantum yields was similar to that described by the authors elsewhere (Opt. is spektr. v. 9, 505, 1960), but using an improved proportional counter and a more careful choice of the supply voltage for the secondary electron multiplier. The monochromator employed was also similar to one previously used (Opt. i spektr. v. 13, 846, 1962). The experiments have shown that to describe the x-ray photoeffect it is essential to take account of the refraction of the beam in the photocathode, especially at small incidence angles, when reflection takes place. For ultrasoft x-rays, the electron flux attenuates exponentially almost in all cases, except at very small angles incidence, when the deviation from the exponential attenuation can be used to estimate the thickness of the layer from which electrons can be emitted without attenuation. These data agree well with those of H. Kanter and E. J. Sternglass (Phys. Rev. v. 126, 620, 1962). The formula derived for the quantum yield also agrees with the experimental results. Orig. art. has: 8 figures, 4 formulas, and 2 tables.

Card 2/3

L 14428-65
ACCESSION NR: AP4048401

ASSOCIATION: Leningradskiy gosudarstvenny*y universitet (Leningrad State University)

SUBMITTED: 22May64 ENCL: 00

SUB CODE: OP, SS NR REF SOV: 009 OTHER: 005

Card 3/3

ACCESSION NR: AP4020935 S/0051/64/016/002/0310/0319

AUTHOR: Lukirskiy,A.P.; Savinov,Ye.P.; Yershov,O.A.; Shepelev, Yu.F.

TITLE: Reflection coefficients for radiation with wavelengths of 23.6 to 113 Angstrom for a number of elements and substances and determination of the refraction indices and absorption coefficients

SOURCE: Optika i spektroskopiya, v.16, no.2, 1964, 310-319

TOPIC TAGS: reflection coefficient, absorption coefficient, titanium, beryllium, carbon, aluminum, chromium, gold, silver, germanium, lithium fluoride, magnesium fluoride, strontium fluoride, potassium chloride, polystyrene

ASBTRACT: In view of the interest in reflection of ultrasoft x-radiation from different substances that can be used for coating diffraction gratings and other optical components, in the present study there were determined experimentally the values of the total external reflection coefficient R of Be,C,Al,Ti,Cr,Ge,Ag,Au,LiF, MgF_2,KCl,SrF_2, polystyrene and F-1 type glass as a function of the angle of incidence (mostly glancing angles in the range under 10°) for radiation of wavelengths 23.6, 31.4, 44, 67 and 112 Å. These are the wavelengths of the KX lines of O,N,C,B

Card 1/3

ACCESSION NR: AP4020935

and Be. The measurements were carried out using a modification of the setup and procedure employed earlier (A.P.Lukirskiy and Ye.P.Savinov,Opt.i spektr.,14,295,1963). The materials for the most part were in the form of 1000 Å thick coatings vacuum evaporated onto glass plates; the halide layers were deposited over undercoatings of Al or Au on glass, mainly to provide the requisite conductivity for subsequent absorption measurements. The results for R are presented in the form of curves (R versus angle of incidence) and in a table. The reflection curves were then used for calculating the index of refraction and the absorption coefficient by means of the usual Fresnel formulas; the results are tabulated. To check the validity of the calculations and accuracy of the results, the absorption coefficients of some of the coatings for the same characteristic wavelengths were measured directly by the transmission method. The results are consistent, but the direct absorption values are systematically higher than the values deduced from the reflection curves. A similar divergence was obtained for copper layers by L.G.Parratt (Phys.Rev.,95,359, 1954), who attributed it to decrease in density of the substance with approach to the surface; this is also assumed to be the reason for the divergences observed in the present case. The results are discussed briefly in a final section. Orig.art. has: 17 formulas, 10 figures and 3 tables.

ACCESSION NR: AP4038780 S/0048/64/028/005/0866/0871

AUTHOR: Lukirskiy,A.P.; Savinov,Ye.P.; Bry*tov,I.A.; Shepelev,Yu.F.

TITLE: Efficiency of secondary electron multipliers with Au, LiF, MgF_2, SrF_2, BeO, KCl and CsI photocathodes in the 23.6 to 113 Angstrom region /Report, Seventh Conference on X-Ray Spectroscopy held in Yerevan 23 Sep to 1 Oct 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.5, 1964, 866-871

TOPIC TAGS: x-ray detection, radiation detector, electron multiplier, photocathode, photocathode efficiency

ABSTRACT: The quantum efficiency of Au, LiF, MgF_2, SrF_2, BeO, KCl and CsI photocathodes were measured in secondary electron multipliers throughout the ultrasoft x-ray region from 23.6 to 113 A and at grazing angles from 4° to 40° (angles of incidence from 50° to 86°). An absolute accuracy of 15% is claimed for the measurements, and the data presented (except those for the BeO photocathodes, which were not reproducible) are recommended for absolute x-ray intensity measurements to this accuracy. The gold photocathodes were included for comparison, and the other materials were selected as the most efficient photocathodes that are not poisoned by air. The

Card 1/3

ACCESSION NR: AP4038780

LiF, MgF_2, SrF_2, KCl and CsI photocathodes were vacuum deposited on Al films on glass. The BeO photocathodes were prepared by oxidizing a film of Be, vacuum deposited on W or Mo. The BeO photocathodes prepared in this way were not reproducible, however, and only the data for the most efficient BeO photocathode are given. The thickness of the photocathodes was determined interferometrically. The thickness of the Au cathode was 1000 Å; that of the CsI cathode, 5500 Å; and the remaining photocathodes were 2500 Å thick. These thicknesses are greater than the depth from which the photoelectrons can emerge. Tungsten bremsstrahlung was employed for the measurements. The x-ray intensity was measured with an alcohol-argon Geiger counter and a methane proportional counter. The efficiencies of the counters were determined from absorption measurements, data of A.P.Lukirskiy and T.M.Zimkina (Izv.AN SSSR, Ser.fiz.27,104,1963) being employed for the alcohol-argon counter. Curves are presented showing the quantum efficiency of each photocathode at several selected wavelengths as a function of the grazing angle. Most of these curves have a rather sharp maximum at some small grazing angle and are otherwise smooth. Curves are also presented showing the quantum efficiency of each photocathode at 20° grazing angle as a function of the wavelength. These curves show marked fine structure near the absorption edges of the cathode materials but are reasonably smooth between. It is recommended that for any specific application a photocathode be selected for which the

Card 2/3